



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,991	02/16/2001	Sydney Edward Fisher	60,130-1003	3791

26096 7590 06/16/2004

CARLSON, GASKEY & OLDS, P.C.  
400 WEST MAPLE ROAD  
SUITE 350  
BIRMINGHAM, MI 48009

EXAMINER

BOSWELL, CHRISTOPHER J

ART UNIT PAPER NUMBER

3676

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/784,991

Applicant(s)

FISHER ET AL.

Examiner

Christopher Boswell

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-7, 11-13 and 15-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-7, 11-13 and 15-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 4-5, 11-12, 18, 21-24 and 26-27 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Number 4,643,005 to Logas.

Logas discloses a latch mechanism for retaining a door with a latch bolt (18) having a closed condition capable of retaining a striker (38 and 40), and a pawl (120) releasably securing the latch bolt (figures 2 and 3), where the latch bolt is made from a plurality of structural laminations (column 4, lines 19-31) of material wherein a profile of one of the plurality of laminations is different from a profile of the other of the plurality of laminations (figure 4), as in claims 22 and 4, wherein the plurality of latch bolt laminations combine to form a closed abutment surface (figure 2), a first safety abutment surface (124) for contact with the pawl, a retention surface (the hook of 18) for engagement with the striker and a latch pivot pin surface (44), as in claim 5, wherein one of the plurality of laminations includes a tab (figure 4, either side

Art Unit: 3676

of the connection of 18 to 52), as in claims 11 and 23, wherein the tab is located on the latch bolt and is for engagement with a chassis (claim 4, lines 32-36) of the latch mechanism, as in claims 12 and 24, wherein the laminations are formed in one piece (figure 4), as in claim 21, as well as, the other of said plurality of laminations does not include a tab (figure 4), as in claim 26, and the profile of one of the plurality of laminations and the profile of the other of the plurality of laminations are external profiles (figure 4), as in claim 27.

Logas also discloses the latch mechanism is manufactured from steel (column 2, lines 46-54), as in claim 18, where grain structure is considered inherent in aluminum and steel.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-7, 13, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logas, as applied above.

Logas discloses the invention substantially as claimed. Logas discloses the pawl with an abutment surface (124) for engagement with a closed abutment surface and a first safety abutment surface, and a pawl pivot pin surface (126). However, Logas does not disclose the pawl being manufactured from a plurality of laminations. It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the pawl in the

Art Unit: 3676

same manner as the latch bolt, as the pieces work in conjunction with each other, in order to have the same structural properties as the latch bolt.

Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logas, as applied above in view of U.S. Patent Number 5,972,476 to Field.

Logas discloses the invention substantially as claimed. However, Logas does not disclose if the laminations are non-homogeneous in that a strength of the lamination are measured in a first direction are different from a strength of the lamination as measured in a second direction. Field teaches of a laminate in which the layers of the laminate are aligned either unidirectionally or multidirectionally within the laminate component (column 3, lines 26-37) in the analogous art of laminate construction within latch or lock manufacturing for the purpose of manufacturing component parts efficiently and cost effectively to achieve close dimensional tolerances. It would have been obvious to one with ordinary skill in the art at the time the invention was made to employ various laminate directions with in the latch mechanism in order to manufacture component parts efficiently and cost effectively to achieve close dimensional tolerances. It is inherent that a fiber would be stronger in the transversal direction than in the lateral direction. Thus making the fiber laminate non-homogeneous in the direction the strength would be measured. Further more if the fibers in the laminations were aligned unidirectionally it would be inherent that the laminations could then be aligned in the direction of the respective strength directions. It would also then be possible to miss-align the laminates according to the desired results.

Art Unit: 3676

Claims 19 and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Logas, as applied above, in view of U.S. Patent Number 4,896,908 to Kleefeldt.

Logas discloses the invention substantially as claimed. However, Logas does not disclose the latch mechanism having a plastic over molding. Kleefeldt teaches the use of a molded plastic housing (column 1, lines 63-68) in the analogous art of latch assemblies, as in claims 19 and 20 for the purpose of reducing squeak and rattling. It would have been obvious to one with ordinary skill in the art at the time the invention was made to further modify the latch of Logas to include a molded plastic housing over the plurality of laminations in the latch assembly in order to eliminate metal to metal contact. The plastic housing can be used to dampen noises associated with a latch in the opening and closing of the given door. The molded plastic can also be used to partially secure the latch mechanism.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to latch mechanisms:

U.S. Patent Number 6,672,632 to Speed et al., U.S. Patent Number 5,820,170 to Clancy, U.S. Patent Number 4,856,829 to Nakamura et al., U.S. Patent Number 4,358,141 to Hamada.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Boswell whose telephone number is (703) 305-4067. The examiner can normally be reached on 8:30 - 5:00 M-F.

Art Unit: 3676

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink that reads "Daniel P. Stodola". The signature is fluid and cursive, with the first name "Daniel" being larger and more prominent than the last name "Stodola".

DANIEL P. STODOLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

CJB  
June 10, 2004